Ship June 3rd

Work Order ID 59086

May 26, 2010 9:46:12 AM

Item ID: D350-591-215 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Start Qty:** 2.00 **Cust Item ID:**

Required Date: 6/02/10 **Req'd Qty:** 2.00 **Customer:**

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start** **Stop**

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

Draw Nbr	Revision Nbr
D3168	Rev A
DSI 9472	A

100 0.00

DC — DOCUMENT CONTROL

Document Control

Memo 0.00

Photocopy bluefile and type labels as per PPP D350-591-215 CHG003

5/06/02

for CL 10/06/02

I put red labels on stock 5/06/02

110 0.00

Large Fab — Large Fab

Large Fab

Memo 0.00

1-Cut D2622-120C extrusion to 57.090" long as per Dwg D3168
2-Drill extrusion as per Dwg D3168 using Jig DT8680 for rivets.(Use only 1st 6holes)
3-Deburr

2

10.05.27

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 59086

May 26, 2010 9:46:12 AM

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Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC5- Inspect part completeness to step on W/O	0.00							
QC									
Quality Control	**Memo**	0.00							
130		0.00							
Large Fab	Large Fab								
Large Fab	**Memo**	0.00							
140	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
QC									
Quality Control	**Memo**	0.00							

8 10/05/22

+2

2

1-Bevel end for welding FWD ONLY
2-Weld Support using Jig ~~DT8781~~ DT8780, weld Fwd End Plate as per QSI 004 & Dwg D3168 10.05.27
A/R Aluminum Rod M112840
3-Grind End Plate flush

2 10.05.27

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 59086

May 26, 2010 9:46:28 AM

Item ID: D350-591-215 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Start Qty:** 2.00 **Cust Item ID:**

Required Date: 6/02/10 **Req'd Qty:** 2.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC5- Inspect part completeness to step on W/O	0.00				72			
QC	Memo	0.00				LH			
Quality Control									
160	Chemical Conversion Coat per QSI005 4.1	0.00				2			
HandFinish	Memo	0.00							
Hand Finishing									
170	QC3- Inspect Part Finish	0.00				2			
QC	Memo	0.00							
Quality Control									

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Start Date: 5/26/10 **Start Qty:** 2.00 **Cust Item ID:**

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QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Large Fab	0.00							
Large Fab						2			
Large Fab	**Memo**	0.00							
	Rivet Leg Assembly as per Dwg D3168	10·05·28							
190	~~QC5- Inspect part completeness to step on W/O~~	0.00							
QC	**Memo**	0.00							
Quality Control	N/A								
200	Large Fab	0.00							
Large Fab						2			
Large Fab	**Memo**	0.00							
	1-Bevel Aft end for welding 2-Inspect for foreign object as per QSI 024 3-Weld Aft End Plate as per QSI 004 & Dwg D3168 A/R Aluminum Rod M112860 4-Grind End Plate flush	10·05·28							

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 59086

May 26, 2010 9:46:33 AM

Item ID: D350-591-215 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Start Qty:** 2.00 **Cust Item ID:**

Required Date: 6/02/10 **Req'd Qty:** 2.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
QC	Memo	0.00							
Quality Control									
220	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									
230	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish	Memo	0.00							
Hand Finishing									

(2) PD 100528

S 10/05/26

+2 LH

(2) BR 10-5-31

Work Order ID 59086

May 26, 2010 9:46:33 AM

Item ID: D350-591-215 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Start Qty:** 2.00 **Cust Item ID:**

Required Date: 6/02/10 **Req'd Qty:** 2.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M114207 **Memo** START TIME: 10:15AM OVEN TEMPERATURE: 320°F FINISH TIME: 10:45AM	0.00 0.00	=> JH	10/05/31		X2	Ø		
250 HandFinish Hand Finishing	~~Pressure Wash per QSI005 4.3~~ WING WALK BATCH: 114432 **Memo**	0.00 0.00				(2)	BL 10-5-31.		
260 QC Quality Control	QC3- Inspect Part Finish **Memo**	0.00 0.00	S.106602			x2 LH			

Work Order ID 59086

May 26, 2010 9:46:39 AM

Item ID: D350-591-215 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Start Qty:** 2.00 **Cust Item ID:**

Required Date: 6/02/10 **Req'd Qty:** 2.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	Pick Kit	0.00							
Packaging	Memo	0.00							
Packaging							14/6/2		2
280	QC4- 100% Inspect kits for completeness	0.00							
QC	Memo	0.00							
Quality Control									
290	Packaging	0.00							
Packaging	Memo	0.00							
Packaging							10/6/2		2

Identify and pack for shipping as per PPP D350-591-215

Location: _____

PPP Rev: C

8/06/02

x2
40

Work Order ID 59086

May 26, 2010 9:46:39 AM

Item ID: D350-591-215 **Accept** **Setup Start**

Revision ID: **Stop**

Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Start Qty:** 2.00 **Cust Item ID:**

Required Date: 6/02/10 **Req'd Qty:** 2.00 **Customer:**

Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
300	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00					10/06/03		
Quality Control									

LD.06.03

Picklist Print

May 26, 2010 9:46:04 AM

6

Work Order ID: 59086

Parent Item: D350-591-215

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Required Date:** 6/02/10

Start Qty: 2.00 **Required Qty:** 2.00

Comments: IPP Rev: A□ 02.10.17□ New issue □KJ/RF
IPP Rev:B 06-06-19 Added D2732-030 AS PER DSI9294 JLM
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Qty per Kit	Total	Qty	Date	Status
D2622-120C		Manufactured	No			110	Each	31.0000	0.5	1		10.05.27	
Step Extrusion													
				Location		**Loc Qty**		**Loc Code**					
				WA		31							
					55214	31				2			
D3067-1		Manufactured	No			130	Each	97.0000	1	2		10.05.27	
End Plate													
				Location		**Loc Qty**		**Loc Code**					
				WA		97							
					57926	97				2			
D3169-1		Manufactured	No			130	Each	18.0000	1	2		10.05.27	
Support													
				Location		**Loc Qty**		**Loc Code**					
				WA		18							
					26685	18				2			
D3077-1		Manufactured	No			180	Each	40.0000	2	4		10.05.27	
Step Leg													
				Location		**Loc Qty**		**Loc Code**					
				WA		40							
					26684	16				4			
					35817	24				~~4~~			

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

May 26, 2010 9:46:05 AM

Work Order ID: 59086

Parent Item: D350-591-215

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Required Date:** 6/02/10

Start Qty: 2.00 **Required Qty:** 2.00

Comments: IPP Rev: A□ 02.10.17□ New issue □KJ/RF
IPP Rev:B 06-06-19 Added D2732-030 AS PER DSI9294 JLM
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Qty per Kit	Total	Qty	Date	Status
D3170-1		Manufactured	No			180	Each	41.0000	2	4		10.05.27	
Spacer													
				Location		**Loc Qty**		**Loc Code**					
				Mezz		41							
					35824	41				4			
MS20600-AD4W4		Purchased	No			180	Each	783.0000	12	24		10.05.28	
Rivets													
				Location		**Loc Qty**		**Loc Code**					
				ST309		100							
					114761	100							
				ST321		683							
					113368	62							
					114181	321				24			
					114718	300							
D3067-1		Manufactured	No			200	Each	97.0000	1	2		10.05.28	
End Plate													
				Location		**Loc Qty**		**Loc Code**					
				WA		97							
					57926	97				2			

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

May 26, 2010 9:46:05 AM

Work Order ID: 59086

Parent Item: D350-591-215

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Required Date:** 6/02/10

Start Qty: 2.00 **Required Qty:** 2.00

Comments: IPP Rev: A☐ 02.10.17☐ New issue ☐KJ/RF
IPP Rev:B 06-06-19 Added D2732-030 AS PER DSI9294 JLM
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Qty per Kit	Total	Qty	Date	Status
AN3-35A		Purchased	No			270	Each	71.0000	2	4			
Bolt													

Location		Loc Qty	Loc Code
ST353		71	
	112314	1	
	114382	50	M114382
	114523	20	

AN4-11A		Purchased	No			270	Each	361.0000	6	12			
Bolt													

Location		Loc Qty	Loc Code
ST357		361	
	110382	361	M110382

AN4-13A		Purchased	No			270	Each	413.0000	4	8			
Bolt													

Location		Loc Qty	Loc Code
ST351		113	
	114523	113	M114523
ST357		300	
	114752	300	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

May 26, 2010 9:46:06 AM

Work Order ID: 59086

Parent Item: D350-591-215

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Required Date:** 6/02/10

Start Qty: 2.00 **Required Qty:** 2.00

Comments: IPP Rev: A□ 02.10.17□ New issue □KJ/RF
IPP Rev:B 06-06-19 Added D2732-030 AS PER DSI9294 JLM
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Qty per Kit	Total	Qty	Date	Status
AN4-16A		Purchased	No			270	Each	155.0000	4	8			
Bolt													
				Location		**Loc Qty**		**Loc Code**					
				ST358		155							
					114129	5				114129 5X			
					114330	50				M114130 3X			
					114523	100							
AN960JD10 NAS1149D0363J	NAS1149D0363J	Purchased	No			270	Each	0.0000	4	8			
Washer										M114292			
AN960JD416 NAS1149D0463J	NAS1149D0463J	Purchased	No			270	Each	0.0000	12	24			
Washer										M114576			
D2230-1		Manufactured	No			270	Each	107.0000	2	4			
Lug													
				Location		**Loc Qty**		**Loc Code**					
				ST476		107							
					51566	4							
					54755	21							
					57828	82				57828			
D2230-3		Manufactured	No			270	Each	75.0000	2	4		1/8/02 (2)	
Lug													
				Location		**Loc Qty**		**Loc Code**					
				ST476		75							
					57827	75				57827			

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

May 26, 2010 9:46:07 AM

Work Order ID: 59086

Parent Item: D350-591-215

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Required Date:** 6/02/10

Start Qty: 2.00 **Required Qty:** 2.00

Comments: IPP Rev: A☐ 02.10.17☐ New issue ☐KJ/RF
IPP Rev:B 06-06-19 Added D2732-030 AS PER DSI9294 JLM
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Qty per Kit	Total	Qty	Date	Status
D2732		Manufactured	No			270	f	446.8000	0.5	2 pcs			
Rubber Extrusion									4x 3" = 12 pc per				
				Location		**Loc Qty**		**Loc Code**					
				ST412		446.8							
					56516	446.8				56516			
D2856-400 @ 7.2" + 1 per Kit		Manufactured	No			270	f	269.1088	0.6	1.2			
Abraison Strip													
				Location		**Loc Qty**		**Loc Code**					
				ST403		269.1088							
					50593	62.0568				50592			
					56626	207.052							
MS21042L3		Purchased	No			270	Each	1,722.000	2	4			
Nut													
				Location		**Loc Qty**		**Loc Code**					
				ST300		1722							
					113537	20							
					113644	202				M113644			
					114523	1000							
					114718	500							

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

May 26, 2010 9:46:07 AM

Work Order ID: 59086

Parent Item: D350-591-215

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 5/26/10 **Required Date:** 6/02/10

Start Qty: 2.00 **Required Qty:** 2.00

Comments: IPP Rev: A□ 02.10.17□ New issue □KJ/RF
IPP Rev:B 06-06-19 Added D2732-030 AS PER DSI9294 JLM
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Qty per Kit	Total	Qty	Date	Status
MS21042L4		Purchased	No			270	Each	2,623.000	6	12		6/14/10	
Nut													

Location		Loc Qty	Loc Code	
ST139		2		
	111827	2		
ST300		2621		
	113422	80		M114523
	114523	1533		
	114718	1000		
	9063	8		

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3168	REV. A SHEET 1 OF 2
DATE 02.09.11		TITLE STEP ASSEMBLY, LOW SHORT	SCALE NTS
A	02.09.11	NEW ISSUE	

RELEASED
02.09.20

Part No.	Description	QTY -041	QTY -042
D3168-041	**Step Assembly, Low Short (LH)**	**X**	
D3168-042	**Step Assembly, Low Short (RH)**		**X**
D2622-60	STEP EXTRUSION	1	1
D3067-1	END PLATE	2	2
D3077-1	STEP LEG	2	2
D3169-1	SUPPORT	1	1
D3170-1	SPACER	2	2
MS20600AD4W4	RIVET	12	12

GENERAL NOTES:

1) –041 SHOWN, FOR –042 INSTALL D3169-1 SUPPORT OPPOSITE SIDE
2) WELD PER DART QSI 004
3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
   POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
   BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

wo 59086

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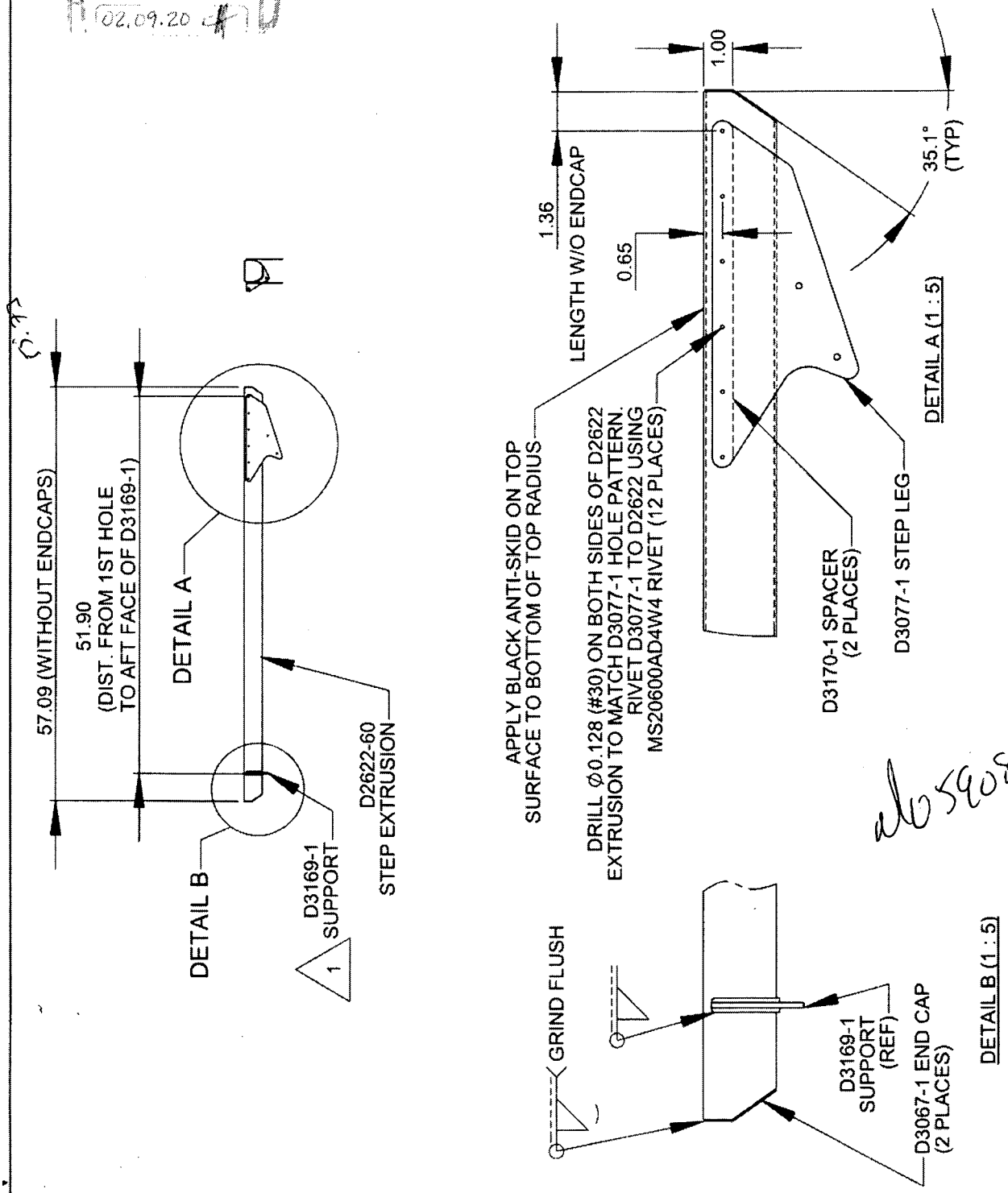
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3168	REV. A SHEET 2 OF 2
DATE 02.09.11		TITLE STEP ASSEMBLY, LOW SHORT	SCALE 1:20

DART

CA COPY ISSUED

RELEASED 02.09.20



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Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X								D350-591-211	***Heli-Access-Step***™, Long Step – High Skid, LH
	X							D350-591-212	***Heli-Access-Step***™, Long Step – High Skid, RH
		X						D350-591-213	***Heli-Access-Step***™, Short Step – High Skid, LH
			X					D350-591-214	***Heli-Access-Step***™, Short Step – High Skid, RH
				X				D350-591-215	***Heli-Access-Step***™, Short Step – Low Skid, LH
					X			D350-591-216	***Heli-Access-Step***™, Short Step – Low Skid, RH
						X		D350-591-311	***Heli-Access-Step***™, Long Step – High Skid, LH
							X	D350-591-312	***Heli-Access-Step***™, Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
	1							D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
		1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
			1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
				1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
					1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
						1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
							1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
		2	2	2	2			D2230-1	MOUNTING LUG
		2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8							D2274	RADIUS BLOCK
						2	2	D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2			AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	*DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

REFERENCE ONLY

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-6
REF FAA STC: SH967NE

For D350-591-213/-214/-215/-216 steps, customers have the option of installing D2732-030 cushion under the clamps to accommodate varying crosstube diameters and to improve fit, as indicted in Installation Instructions D350-591. This Service Instruction adds longer AN4-16A bolts to the parts list to allow installation of these cushions. See Figure 1 on sheet 2 of this service instruction for reference. Installation of the D2856-400-720 Abrasion Strips per Installation Instructions D350-591 is not required when the cushions are installed.

For D350-591-213/-214/-215/-216 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -213	Qty -214	Qty -215	Qty -216	Part Number	Description
X				D350-591-213	***Heli-Access-Step*** ™, Short Step – High Skid, LH
	X			D350-591-214	***Heli-Access-Step*** ™, Short Step – High Skid, RH
		X		D350-591-215	***Heli-Access-Step*** ™, Short Step – Low Skid, LH
			X	D350-591-216	***Heli-Access-Step*** ™, Short Step – Low Skid, RH
4	4	4	4	AN4-16A	BOLT

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: D. SHEPHERD (DE # 02)

DATE: 09.08.05
CERT. NO.: SH92-6
ISSUE NO.: 11

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	RF	09.08.05

DESIGN	gp	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED	gp	DRAWING NO. DSI 9472 — REV. A — SHEET 1 OF 2
MFG. APPR.	NOA	
APPROVED		TITLE: BOLT ADDITION — SCALE: NTS
DE APPR.		
DATE	09.08.05	

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

* **NOTE:** Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE